

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claims 1-28 (canceled).**

**Claim 29 (new):** A device for determining the state of a soot particle filter of an internal combustion engine, comprising an electrical measuring arrangement configured as a soot sensor for measuring a soot deposit of the soot particle filter, including an electrical component with a conductor structure for exciting an electrical or magnetic field influenceable by the soot deposit and characterizes an electrical or magnetic characteristic variable of the component as a measure of a quantity of the soot deposit, wherein the conductor structure is arranged such that a partial volume region of the soot particle filter is penetrated by the electrical field and the partial volume region forms part of the component, and the electrical component is a coil or a capacitor.

**Claim 30 (new):** The device as claimed in claim 29, wherein the soot deposit is measurable in partial volume regions of the soot particle filter that are different from one another.

**Claim 31 (new):** The device as claimed in claim 29, wherein the measuring means measures a characteristic variable of the component which is linked to the electrical impedance.

**Claim 32 (new):** The device as claimed in claim 31, wherein at least one of the absolute value and phase of the electrical impedance is measurable.

**Claim 33 (new):** The device as claimed in claim 31, wherein at least one of the ohmic resistance, the capacitance and the inductance of the component is measurable.

**Claim 34 (new):** The device as claimed in claim 32, wherein at least one of the ohmic resistance, the capacitance and the inductance of the component is measurable.

**Claim 35 (new):** The device as claimed in claim 29, wherein switching means are provided for automatically initiating regeneration of the filter when a predefinable triggering measured value is reached.

**Claim 36 (new):** The device as claimed in claim 29, wherein switching means are provided for automatically ending the regeneration of the filter when a predefinable limiting measured value is reached.

**Claim 37 (new):** The device as claimed in claim 29, wherein means are provided for at least one of measuring the temperature of the filter and performing temperature compensation on the measurement signal.

**Claim 38 (new):** The device as claimed in claim 29, wherein a coil-shaped conductor structure is arranged at least partially in the interior of the soot particle filter.

**Claim 39 (new):** The device as claimed in claim 29, wherein a coil-shaped conductor structure is arranged outside the soot particle filter.

**Claim 40 (new):** The device as claimed in claim 38, wherein the soot particle filter is of cylindrical configuration, and a coil longitudinal axis of the coil-shaped conductor structure is oriented one of approximately parallel and approximately perpendicular to a longitudinal axis of the soot particle filter.

**Claim 41 (new):** The device as claimed in claim 39, wherein the soot particle filter is of cylindrical configuration, and a coil longitudinal axis of the coil-shaped conductor structure is oriented one of approximately parallel and approximately perpendicular to a longitudinal axis of the soot particle filter.

**Claim 42 (new):** The device as claimed in claim 38, wherein the measuring arrangement further comprises a second conductor structure, the coil-shaped conductor structure being operatively connected to the second conductor structure which has an electrical characteristic variable influenceable by the soot deposit and measurable by the measuring means.

**Claim 43 (new):** The device as claimed in claim 42, wherein the measuring arrangement further comprises a second conductor structure, the coil-shaped conductor structure being operatively connected to the second conductor structure which has an electrical characteristic variable influenceable by the soot deposit and measurable by the measuring means.

**Claim 44 (new):** The device as claimed in claim 42, wherein the second conductor structure is a second coil-shaped conductor structure, and a variable which correlates to the mutual inductance which is effective between the coil-shaped conductor structures is measurable by the measuring means.

**Claim 45 (new):** The device as claimed in claim 43, wherein the second conductor structure is a second coil-shaped conductor structure, and a variable which correlates to the mutual inductance which is effective between the coil-shaped conductor structures is measurable by the measuring means.

**Claim 46 (new):** The device as claimed in claim 42, wherein the coil-shaped conductor structure is arranged in an exhaust gas flow direction with an offset with respect to the second conductor structure.

**Claim 47 (new):** The device as claimed in claim 43, wherein the coil-shaped conductor structure is arranged in an exhaust gas flow direction with an offset with respect to the second conductor structure.

**Claim 48 (new):** The device as claimed in claim 44, wherein the coil-shaped conductor structure is arranged in an exhaust gas flow direction with an offset with respect to the second conductor structure.

**Claim 49 (new):** The device as claimed in claim 44, wherein the coil-shaped conductor structure is arranged in an exhaust gas flow direction with an offset with respect to the second conductor structure.

**Claim 50 (new):** The device as claimed in claim 29, wherein the conductor structure comprises a pair of electrodes with a first electrode and a second electrode spaced from the first electrode, the partial volume region being arranged between the first electrode and the second electrode.

**Claim 51 (new):** The device as claimed in claim 50, wherein at least the first electrode and the second electrode is arranged on or a short distance from an outer surface of the soot particle filter.

**Claim 52 (new):** The device as claimed in claim 50, wherein the measuring arrangement further comprises at least two pairs of electrodes.

**Claim 53 (new):** The device as claimed in claim 51, wherein the measuring arrangement further comprises at least two pairs of electrodes.

**Claim 54 (new):** The device as claimed in claim 52, wherein the first pair of electrodes is arranged in the exhaust gas flow offset from the second pair of electrodes.

**Claim 55 (new):** The device as claimed in claim 53, wherein the first pair of electrodes is arranged in the exhaust gas flow offset from the second pair of electrodes.

**Claim 56 (new):** The device as claimed in claim 29, further comprising a second electrical measuring arrangement operative as a soot sensor for

measuring a soot deposit is arranged downstream of the soot particle filter with respect to a flow direction through the soot particle filter.